

IN THE CLAIMS:

Claims 1 – 7 cancelled

8. (Currently amended) A wide-angle imaging assembly comprising a main lens produced from an aspheric optical block, said aspheric optical block having:

- a. a vertical axis of symmetry;
- b. a transparent upper surface, at least part of which is capable of reflecting rays that impinge upon it from the inner side of said optical block;
- c. a transparent perimeter surface; and
- d. a transparent lower surface;

wherein the fabrication material of said optical block is selected to enable optical transmittance of a specific spectral range; and wherein light rays in the specific spectral range originating in a first scene having a 360 degrees panoramic perimeter are refracted by said transparent perimeter surface, enter said optical block, are then reflected by said upper surface towards said transparent lower surface, are then refracted by said transparent lower surface, and exit through said transparent lower surface;

said imaging assembly further comprising a transparent area fabricated as a hole in a part of the upper surface around the vertical axis of symmetry extending along the vertical axis of symmetry ~~A wide-angle imaging assembly according to claim 7, wherein the hole extends from the upper surface to the lower surface enabling light from a second scene, located at least partially above said first scene, to pass through said transparent area and travel through the optical block and exit said block.~~

9. (Original) A wide angle imaging assembly according to claim 8, wherein the shape of the hole is conical.

Claims 10-13 cancelled

14. (Currently Amended) A wide-angle imaging assembly comprising a main lens produced from an aspheric optical block, said aspheric optical block having:

- a. a vertical axis of symmetry;
- b. a transparent upper surface, at least part of which is capable of reflecting rays that impinge upon it from the inner side of said optical block;
- c. a transparent perimeter surface; and
- d. a transparent lower surface;

wherein the fabrication material of said optical block is selected to enable optical transmittance of a specific spectral range; and wherein light rays in the specific spectral range originating in a first scene having a 360 degrees panoramic perimeter are refracted by said transparent perimeter surface, enter said optical block, are then reflected by said upper surface towards said transparent lower surface, are then refracted by said transparent lower surface, and exit through said transparent lower surface;

~~A wide-angle said~~ imaging assembly according to claim 1, further comprising:

- a. a hole which is conically shaped, extending along the vertical axis of symmetry from the upper surface to the lower surface; and
- b. a black cone compatibly shaped to be placed inside said hole,

wherein said cone is designed to prevent glare.

Claims 15 – 19 cancelled

20. (Currently Amended) A wide-angle imaging assembly comprising a main lens produced from an aspheric optical block, said aspheric optical block having:

- a. a vertical axis of symmetry;
- b. a transparent upper surface, at least part of which is capable of reflecting rays that impinge upon it from the inner side of said optical block;
- c. a transparent perimeter surface; and
- d. a transparent lower surface;

wherein the fabrication material of said optical block is selected to enable optical transmittance of a specific spectral range; and wherein light rays in the specific spectral range originating in a first scene having a 360 degrees panoramic perimeter are refracted by said transparent perimeter surface, enter said optical block, are then reflected by said upper surface towards said transparent lower surface, are then refracted by said transparent lower surface, and exit through said transparent lower surface;

said imaging assembly further comprising a holding element, fabricated together with and a part of said optical block, said holding element located adjacent to the lower surface and extending downwards, wherein said holding element does not interfere with or block the rays that exit from said lower surface and a mechanical connector having a first edge and a second edge; where said first edge of said connector is designed to connect to said holding element

A wide-angle imaging assembly according to claim 17, wherein the and said second edge of the said connector is designed to connect to an illumination source, positioning said illumination source adjacent to the exterior edge of the said holding element.

Claim 21 cancelled

22. (Original) A wide angle imaging assembly according to claim 20, further comprising an illumination source that distributes illumination rays, which travel through the holding element and are distributed by the surfaces of the optical block, wherein the wavelength of said illumination source is within the range of the specific spectral range to which said optical block is transparent.
23. (Original) A wide angle imaging assembly according to claim 22, comprising a plurality of illumination sources, capable of emitting more than one wavelength, wherein all of said illumination wavelengths are within the specific spectral range to which the optical block is transparent.
24. (Currently amended) A wide-angle imaging assembly comprising a main lens produced from an aspheric optical block, said aspheric optical block having:
- a. a vertical axis of symmetry;
 - b. a transparent upper surface, at least part of which is capable of reflecting rays that impinge upon it from the inner side of said optical block;
 - c. a transparent perimeter surface; and
 - d. a transparent lower surface;
- wherein the fabrication material of said optical block is selected to enable optical transmittance of a specific spectral range; and wherein light rays in the specific spectral range originating in a first scene having a 360 degrees panoramic perimeter are refracted by said transparent perimeter surface, enter said optical block, are then reflected by said upper surface towards said transparent lower surface, are then refracted by said transparent lower surface, and exit through said transparent lower surface;

~~A wide angle imaging assembly according to claim 1,~~ said wide-angle imaging assembly
further comprising:

- a. an axi-symmetric lens, capable of refracting a second panoramic scene, which is at least partially included in the first scene; said axi-symmetric lens being positioned coaxially with and above the optical block;
- b. a hole extending along the vertical axis of symmetry of said optical block;
- c. an optical assembly located within said hole, said optical assembly comprising at least a prism or reflective surface designed to refract or reflect light rays that are reflected by said axis-symmetric lens; and
- d. a compatibly positioned image capture device,

wherein said axi-symmetric lens is capable of transmitting light rays in a second spectral range which is at least partially different than the specific spectral range to which said optical block is transparent; said optical assembly does not interfere or block the rays reflected from said optical block; and said first panoramic scene provided by said optical block in said specific spectral range is at least partly identical to the panoramic scene provided by said axi-symmetric lens in said second spectral range.